

REMARKS

The paper is in response to the Office Action mailed May 19, 2010 ("the Office Action"). The foregoing amendment amends claims 22-52. Claims 21-52 remain pending in view of the amendments. Applicants respectfully request reconsideration of the application in view of the above amendments to the claims and the following remarks. For Examiner's convenience and reference, Applicants present remarks in the order that the Office Action raises the corresponding issues.

In connection with the prosecution of this case and any related cases, Applicants have, and/or may, discuss various aspects of the disclosure of the cited references as those references are then understood by the Applicants. Because such discussion could reflect an incomplete or incorrect understanding of one or more of the references, the position of the Applicants with respect to a reference is not necessarily fixed or irrevocable. Applicants thus hereby reserve the right, both during and after prosecution of this case, to modify the views expressed with regard to any reference.

Please note that Applicants do not intend the following remarks to be an exhaustive enumeration of the distinctions between any cited references and the claims. Rather, Applicants present the distinctions below solely by way of example to illustrate some of the differences between the claims and the cited references. Finally, Applicants request that Examiner carefully review any references discussed below to ensure that Applicants' understanding and discussion of any reference is consistent with Examiner's understanding.

Unless otherwise explicitly stated, the term "Applicants" is used herein generically and may refer to a single inventor, a set of inventors, an appropriate assignee, or any other entity or person with authority to prosecute this application.

Claim Objections

The Office Action objects to the claims for minor informalities which have been corrected by the amendments made herein. As such, the Applicant respectfully requests that the claim objections be withdrawn.

Rejection Under 35 U.S.C. §101

The Office Action rejects claim 52 under 35 U.S.C. §101. Claim 52 has been amended to remove the recitation of a signal as a data storage medium. As such, the Applicant respectfully requests that the rejection of claim 52 be withdrawn.

Rejection Under 35 U.S.C. §112, ¶1

The Office Action rejects claims 21, 41 and 52 under 35 U.S.C. §112, ¶1 as failing to comply with the written description requirement. More specifically, the Office Action cites to "recording a piece of actual image information from an actual position" as lacking written description support. In response, the Applicants have amended the specification to recite this language in the specification instead of a citation to the claims thereby providing explicit written description support in the specification. As the Examiner knows, the claims form part of the disclosure, therefore, no new matter is added by this amendment to the specification.

Because the specification adequately supports claims 21, 41 and 52, Applicants respectfully request that Examiner withdraw the rejection of claims 21, 41 and 52 under 35 U.S.C. §112, ¶1.

Rejection under 35 U.S.C §103(a)

The Office Action rejects claims 21-25, 27-40 and 52 under 35 U.S.C §103(a) over *Ohtomo et al* (U.S. Patent No. 6,859,269) in view of *Turner et al* (European Patent Publication No. EP 0587328 A2). The Office Action rejects claims 41-51 under 35 U.S.C §103(a) over *Ohtomo* in view of *Turner* in further view of *Alhadeef et al* (U.S. Patent Publication No. 2003/0202089). The Office Action rejects claim 26 under 35 U.S.C §103(a) over *Ohtomo* in view of *Turner* in further view of Applicant admitted prior art (AAPA at specification page 2 lines 11-12).

Under 35 U.S.C §103(a), "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." According to MPEP §2142, "[t]he

examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness." Finally, MPEP 2141.III notes that:

"The key to supporting any rejection under 35 U.S.C. 103 is the *clear articulation of the reason(s) why the claimed invention would have been obvious*. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR, 550 U.S. at ___, 82 USPQ2d at 1396." (emphasis added)

The Applicant respectfully traverses the Office Action's characterization of the references and what *Ohtomo* in-fact teaches. *Ohtomo* describes a surveying instrument and method for synthesizing an image from individual images, including artificially integrating lacking, e.g. shadowed, image parts by integration of images taken from a different perspective (where shadowing does not occur) into the synthesized image. Distances and angles are measured with respect to an object to be surveyed (see Figures 4, 5, and 6 and related passages in the specification, column 4, line 47 to column 6, line 27).

Ohtomoto does not address the object of the current invention, namely to provide a device and a method for **determining an actual position (A) of a geodetic instrument**. Furthermore, *Ohtomoto* is silent about the feature of "**a dead range within which the propagation of the signal is impaired in such a way that a direct determination of the actual position by means of the positioning system is at least limited**". In the instance that the Examiner was giving these elements limited patentable weight due to their recitation in the preamble, those elements have been also recited in the body of claim 21 so as to insure that they are given patentable proper patentable weight.

Consequently, as already clear from the differing features in the preamble and body of claim 21, the surveying instrument and method disclosed by *Ohtomo* are dedicated to a clearly different method than the current invention, namely synthesis of images, but not determination of actual positions of a geodetic instrument which may be located in a region ("dead range") that is invisible for a positioning system.

Positions of a geodetic instrument or surveying instrument that are not accessible for positioning system (GPS), and related "dead ranges" are not within the scope of the disclosure of *Ohtomoto*.

The inventive method for determining an actual position of a geodetic instrument comprising a positioning system based on reception of shadowable signals and a dead range...comprises recording 3 pieces of image information from two different known positions (P1, P2, determined by means of the positioning system), and a (third) "actual" position (e.g. in the "dead range", see Fig. 6), wherein each of the three pieces of image information contains at least (the same) two identifiable reference structures (5, 5'; see Fig. 5 and Fig. 6). From the positions P1, P2, A always at least one distance to the reference structures is measured, in order to finally derive the actual position A.

As *Ohtomoto* does not teach a determination of an actual position of a geodetic or surveying instrument but synthesis of different features, the matching of (identical) identifiable reference structures for determining an unknown location A, and thus the central scope of the subject matter of claim 21, is not part of *Ohtomoto's* disclosure.

Consequently, *Ohtomoto* cannot even be regarded as closely related art to the subject matter of claim 21, the intended application and the required method steps being clearly different from each other.

EP 0587328 (Turner) discloses an image processing system for determining the 3D location of an object from 2D images, wherein the images are obtained from (two) cameras (10, 20) mounted at a fixed distance from each other and having a number of markers (30) located within the field of view of each camera, said markers being positioned in a single plane.

Turner also does not even mention the problem and the object of the current invention, namely to provide a

method for determining an actual position (A) of a geodetic instrument (1, 1'), comprising a positioning system which is based on the reception of shadowable signals, and a dead range (T, T') within which the propagation of the signal is impaired in such a way that a direct determination of the actual position (A) by means of the positioning system is at least limited.

Consequently, even by combining *Ohtomoto's* and *Turner's* teachings, one of ordinary skill in the art would clearly not obtain the method of claim 21. Claims 22-52 depend from claim 21. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Therefore, the Applicant respectfully requests that the rejections of claims 22-52 be withdrawn at least for the same reasons as claim 21.

Charge Authorization

The Commissioner is hereby authorized to charge payment of any of the following fees that may be applicable to this communication, or credit any overpayment, to Deposit Account No. 23-3178: (1) any filing fees required under 37 CFR § 1.16; (2) any patent application and reexamination processing fees under 37 CFR § 1.17; and/or (3) any post issuance fees under 37 CFR § 1.20. In addition, if any additional extension of time is required, which has not otherwise been requested, please consider this a petition therefor and charge any additional fees that may be required to Deposit Account No. 23-3178.

CONCLUSION

In view of the foregoing, Applicants submit that the pending claims are allowable. In the event that Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview or overcome by an Examiner's Amendment, Examiner is requested to contact the undersigned attorney.

Dated this 7th day of July, 2010.

Respectfully submitted,

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